

## LETTERS TO THE EDITOR

**Multifocal bone tuberculosis in one AIDS patient**

Extrapulmonary tuberculosis (ETB) can be recognised in approximately 15% of patients with tuberculosis, and in about 20% of them osteoarticular involvement may be found.<sup>1</sup> ETB and disseminated forms are more frequent in immunocompromised patients, and especially in HIV-infected individuals. In this group, ETB has been considered to be among the AIDS opportunistic infections since 1987.<sup>2</sup> However, the relative prevalence of bone tuberculosis is lower in AIDS-related ETB than in normal hosts. For example, ETB was diagnosed in 87 out of 265 (30%) AIDS cases reported in our institution up to December 1990, but bone involvement was recognised in only 4 (1.6%) of them.

Usually osteoarticular tuberculosis affects only one or few areas in vertebrae and intervertebral discs, and large articulations such as hip and knee.<sup>1</sup> In people living in highly endemic tuberculosis areas, such as India, Pakistan, and Africa, bone tuberculosis has been reported exceptionally in atypical sites or involving multiple bone foci, especially in otherwise immunosuppressed hosts.<sup>3-6</sup> Here we describe a Spanish woman, HIV-seropositive, who developed multiple masses in the head and the legs, as a manifestation of a multifocal bone tuberculosis.

A 22 year old white woman was admitted with a 1 month history of asthenia, fever, and the gradual appearance of painful, fixed masses 2 to 4 cm in diameter on the head and the left pretibial region. She was HIV-seropositive and had acquired the infection six years previously through sexual intercourse with an HIV-infected drug user. She had a CD4 cell count of 280/ml. Needle aspiration of one of these masses produced a caseous material, in which acid-fast bacilli were found. Subsequently, cultures grew *Mycobacterium tuberculosis*. A chest radiograph did not show abnormal findings, but a radiograph of the cranium revealed several lytic images (fig 1, C and D). These findings were confirmed in the CT scan (fig 1, A and B). A roentgenogram of the left tibia showed an irregular lytic area on the metaphysis, with a pseudocystic appearance. A <sup>99</sup>Tc skeletal gammogram identified several high uptake regions, including those recognised on the radiographs and by CT. Remission of symptoms and reduction in the size of the masses were obtained gradually after antituberculous treatment was started.

The reported case represents an exceptional form of bone tuberculosis, which in view of the radiological findings has been called "cystic" or "pseudocystic" in the past.<sup>6</sup> It appeared as multiple expansive and lytic areas preferentially in long and flat bones.<sup>5,6</sup> A chronic

indolent course with or without fever has been usually reported, and a favourable response was generally obtained after the introduction of standard antituberculous drugs, as occurred in our patient. Previous to the HIV era, multifocal bone tuberculosis was almost always associated with pulmonary tuberculosis,<sup>6</sup> but it was absent in this case. In fact, metastatic disease was initially suspected before diagnostic needle aspiration. These findings point to the atypical manifestations of tuberculosis in HIV-infected individuals, and emphasise the need to consider it initially when unusual clinical findings are seen in AIDS patients. Early diagnosis is essential since excellent therapy is available.

V SORIANO

JTOR  
Service of Infectious Diseases,  
Hospital de Badalona  
"Germans Trias i Pujol",  
Barcelona, Spain

Address correspondence to: Dr V Soriano, Calle Rafael Calvo 7, 2° A, 28010-Madrid, Spain.

- 1 Alvarez S, McCabe W. Extrapulmonary tuberculosis revisited: a review of experience at Boston City and other hospitals. *Medicine (Baltimore)* 1984;63:25-55.
- 2 CDC. Revision of the CDC surveillance case definition for Acquired Immunodeficiency Syndrome. *MMWR* 1987;36 (suppl):317.
- 3 McTammam J, Moser K, Houk V. Disseminated bone tuberculosis. *Am Rev Resp Dis* 1963;87:889-95.
- 4 Ormerod L, Grundiz M, Rahman M. Multiple tuberculosis bone lesions simulating metastatic disease. *Tubercle* 1989;30:30-57.
- 5 Mall JC, Genant HK, Gamsu G. Multifocal tuberculosis of the ribs. *Am Rev Respir Dis* 1976;114:635-7.
- 6 Cremin B, Fisher R, Levinsohn M. Multiple bone tuberculosis in the young. *Br J Radiol* 1970;43:638-45.

Accepted for publication 2 March 1992.

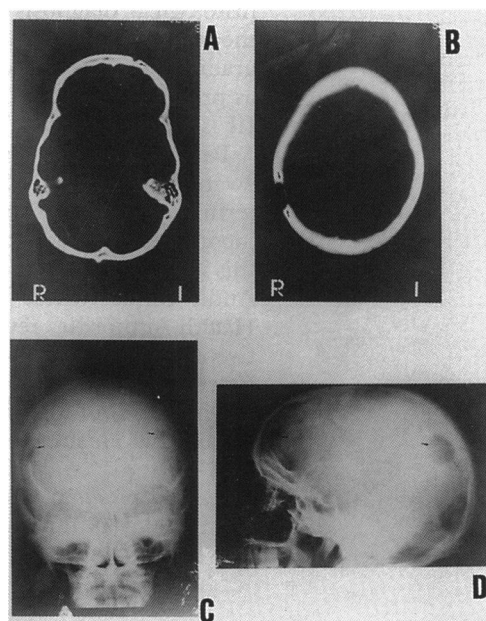


Figure CT (A and B) and skull radiographs (C and D) of the patient.